

**A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT OF THE PROPOSED,  
SUBDIVISION AND REZONING OF PORTION 176 OF THE FARM GOEDGELOOF  
NO. 745, FROM AGRICULTURE ZONE 1 TO SPECIAL ZONE FOR RURAL  
RESIDENTIAL PURPOSES IN ST FRANCIS BAY, KOUGA LOCAL  
MUNICIPALITY, EASTERN CAPE PROVINCE**

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**Note:** This report follows the minimum standard guidelines required by the South African Heritage Resources Agency for compiling Archaeological Heritage Phase 1 Impact Assessment (AHIA) reports.

## **SUMMARY**

### **Purpose of the study**

To conduct a Phase 1 Archaeological Impact Assessment of the proposed subdivision and rezoning of Portion 176 of the farm Goedgeloof No. 745, from agriculture zone 1 to special zone for rural residential purposes in St Francis Bay, Kouga Local Municipality, Eastern Cape Province; to evaluate the importance of the archaeological sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

### **Site and location**

The proposed property for development is situated approximately 12 kilometres north-west of Humansdorp on the southern bank of the Kromme River estuary, and about two kilometres from the coast.

### **Type of development**

The subdivision and rezoning of Portion 176 of the farm Goedgeloof No. 745, from agriculture zone 1 to special zone for the construction of three residential units.

### **The investigation**

The property is covered with dense grass and coastal dune vegetation which made it difficult to observe archaeological material/sites.

### **Cultural sensitivity**

The proposed area for development appears to be of very low cultural sensitivity, but sites and materials may be buried. Research and surveys in the wider vicinity indicated that the adjacent Sand River/Goedgeloof dune field and Cape St Francis region are extremely rich in archaeological heritage sites and material.

## **Recommendations**

1. If any concentrations of archaeological material are uncovered during development, it should be reported immediately to the Albany Museum and/or the South African Heritage Resources Agency.
3. Construction managers/foremen should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

## **Community consultation**

Consultation with the Gamtkwa KhoiSan Council was conducted as required by the National Heritage Resources Act No. 25 of 1999, Section 38(3e). They will communicate their recommendations to CEN Integrated Environmental Management Unit if required.

## **PROJECT INFORMATION**

### **Status**

The report is part of an Environmental Impact Assessment.

### **The type of development**

The subdivision and rezoning of Portion 176 of the farm Goedgeloof No. 745, from agriculture zone 1 to special zone for the construction of three residential units. The total property is approximately 8,1 ha in size.

### **The Developer**

Hemsley Family Trust

### **Terms of reference**

The original proposal was to conduct a Phase 1 Archaeological Impact Assessment of the proposed subdivision and rezoning of portion 176 of the farm Goedgeloof No. 745, from agriculture zone 1 to special zone for rural residential purposes in St Francis Bay, Kouga Local Municipality, Eastern Cape Province; to evaluate the importance of the archaeological sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

## **BRIEF ARCHAEOLOGICAL BACKGROUND**

### **Literature review**

The oldest evidence of the early inhabitants in the region are large stone tools, called hand axes and cleavers which can be found in the river gravels which capped the hill slopes in the region, and on the calcrete floors exposed in the dune systems along the coast towards Cape St Francis (Laidler 1947; Deacon & Geleijnse 1988; Binneman 2001, 2005). The time period is known as the Earlier Stone Age and the stone tools belong to the Acheulian Industry, dating between approximately 1,5 million and 250 000 years old.

After this period, the Acheulian hand axes and cleavers were replaced by a totally different

looking stone tool industry, the so-called flake and blade industries of the Middle Stone Age (MSA). The time period, between 120 000 - 30 000 years ago, also witness the emergence of the first modern humans (*Homo sapiens sapiens*). The oldest remains of anatomically modern humans in the world (some 110 000 yeas old) comes from the Klasies River complex of caves some 15 kilometres east of the proposed development (Singer & Wymer 1982; Rightmire & Deacon 1991; Deacon 1992, 1993, 2001; Deacon, H. J & Shuurman, R. 1992). The archaeological deposits at the Klasies River Caves (1-5) date to 120 000 years old and also yielded the oldest evidence in the world for the exploitation of marine food resources by people.

Although humans were already anatomically modern by 110 000 years ago, they were not yet fully exhibiting 'modern behaviour' and only developed into culturally modern behaving humans between 80 000 and 70 000 years ago. This occurred during cultural phases known as the Still Bay and Howieson's Poort time periods/stone tool traditions. The Howison's Poort is well represented at Klasies River Cave 2 (Deacon & Wurz 1996; Wurz 1999).

Unfortunately, no caves and shelters in the region have been excavated yet with deposits dating between 25 000 and 5 000 years ago. Nevertheless, from sites farther along the coast and adjacent Cape Mountains, we know that the past 20 000 years, called the Later Stone Age (LSA), introduced several 'new' technological innovations. Others became more common, such as rock art, burials associated with grave goods, painted stones, new microlithic stone tool types, some fixed to handles with mastic, bow and arrow, containers, such as tortoise shell bowls and ostrich eggshell flasks (sometimes decorated), decorative items, bone tools and many more (Deacon & Deacon 1999).

The period between 20 000 and 14 000 years ago experienced extremely cold climatic conditions and had a great influence on the environment, the people and animals. During the Last Glacial Maximum (the last ice age) vast areas were exposed along the coast which created favourable conditions for grassland and grazing animals (also inland). The remains from archaeological sites indicated that there were several large grazing animal species which are now extinct, for example the giant buffalo, the giant hartebeest and the Cape horse. After 14 000 years ago the climate started to warm up again and the sea level rose rapidly. By 12 000 years ago the sea was close to modern conditions and the previously exposed grassland also disappeared due to the rising sea level, causing the extinction of many grassland species including the giant buffalo, hartebeest and the Cape horse (Deacon & Deacon 1999).

Between 10 000 and 8 000 years ago the environment became bushier and gave rise to territorial smaller type browsing animals that lived in small groups or pairs. Most of the large Last Glacial grazing animals disappeared from the archaeological deposits during this time period from sites in the region. A characteristic of the past 8 000 years, also known as the Wilton time period, was the large number of small (microlithic) stone tools in the shelters and open-air middens of the region. However, by 4 500 years ago these stone tools were replaced at the the Klasies River Caves by large quartzite stone tools, labelled the Kabeljous Industry (Binneman 2001, 2005). The first real change in the socio-economic landscape came some 2 000 years ago when Khoi pastoralists settled in the region. They were the first food producers and introduced domesticated animals (sheep, goats and cattle) and ceramic vessels to the region (Binneman, 2001, 2005).

## References

- Binneman, J.N.F. 2001. An introduction to a Later Stone Age coastal research project along the south-eastern Cape coast. *Southern African Field Archaeology* 10:75-87.
- Binneman, J.N.F. 2005. Archaeological research along the south-eastern Cape coast part1: open-air shell middens *Southern African Field Archaeology* 13 & 14:49-77.
- Deacon, H.J. 1992. Southern Africa and modern human origins. *Philosophical Transactions of the Royal Society, London* 337: 177-83.

- Deacon, H.J. 1993. Southern Africa and modern human origins. In: Aitken, M. J., Stringer, C. B. & Mellars, P. A., eds, *The origin of modern humans and impact of chronometric dating*. Princeton: Princeton University Press, pp. 104–17.
- Deacon, H.J. 2001. Modern human emergence: an African archaeological perspective. In: Tobias, P. V., Raath, M. A., Moggi-Cecchi, J. & Doyle, G. A., eds, *Humanity from African Renaissance to coming Millennia*. Johannesburg: University of the Witwatersrand Press, pp. 213–22.
- Deacon, H.J. & Geleijnse, V. 1988. The stratigraphy and sedimentology of the Main Site sequence at Klasies River, South Africa. *South African Archaeological Bulletin* 43:5-14.
- Deacon, H. J & Shuurman, R. 1992. The origins of modern people: the evidence from Klasies River. In: Bräuer, G. & Smith, F. H., eds, *Continuity or replacement: controversies in Homo sapiens evolution*. Rotterdam: Balkema, pp. 121–9.
- Deacon, H. J. & Wurz, S. 1996. Klasies River Main Site, Cave 2: a Howiesons Poort occurrence. In: Pwiti, G. & Soper, R., eds, *Aspects of African Archaeology*. Harare: University of Zimbabwe Publications, pp. 213–8.
- Deacon, H.J. & Deacon, J. 1999. *Human beginnings in South Africa: uncovering the secrets of the Stone Age*. Cape Town: David Phillips Publishers.
- Laidler, P.W. 1947. The evolution of Middle Palaeolithic technique at Geelhoutboom, near Kareedouw, in the southern Cape. *Transactions of the Royal Society of South Africa* 31:283-313.
- Rightmire, G.P. & Deacon, H.J. 1991. Comparative studies of Late Pleistocene human remains from Klasies River Mouth, South Africa. *Journal of Human Evolution* 20:131-156.
- Singer, R. & Wymer, J. 1982. *The Middle Stone Age at Klasies River Mouth in South Africa*. Chicago: University of Chicago Press.
- Wurz, S. 1999. The Howiesons Poort backed artefacts from Klasies River: an argument for symbolic behaviour. *South African Archaeological Bulletin* 54: 38–50.

### **Cultural sensitivity of the adjacent coastal and dune area**

The adjacent Goedgeloof dune field is very rich in archaeological heritage sites dating between the Earlier Stone Age periods to recent times (Binneman 2001, 2005). Of special interest is the Middle Stone Age stone tool manufacturing sites and associated fossil bone accumulations. There are also many hunter-gatherer shell middens in the dunes dating from some 5 000 years old and a few Khoi pastoralists shell middens. The pastoralist middens are very important and rate among the richest in South Africa and yielded a large number of remains of sheep, goat and cattle. During the development of the nearby links golf course many shell middens and other archaeological materials were found.

### **Museum/University databases and collections**

The Albany Museum in Grahamstown houses collections and information from the region. Other institutions also having collections and information from the region include the University of Cape Town and Iziko Museums.

### **Relevant impact assessments:**

- Binneman, J. 2008. A phase 1 archaeological heritage impact assessment of the proposed rezoning and subdivision of portion 10 and 13 of the farm Goedgeloof No. 745, for a residential development, Kouga Municipality, Eastern Cape Province. Prepared for CEN Integrated Environmental Management Unit, Port Elizabeth.
- Nilssen, P. 2005. *St Francis Links - Golf Estate Phase 2 – mitigation of archaeological heritage resources Zone 3* prepared for: South African Heritage Resources Agency.

## **DESCRIPTION OF THE PROPERTY**

### **Area surveyed**

#### Location data

The proposed property for subdivision and rezoning, Portion 176 of the farm Goedgeloof No. 745, from agriculture zone 1 to special zone for the construction of three residential units, is situated approximately 12 kilometres north-west of Humansdorp on the southern bank of the Kromme River estuary. It is located next to (west) of the Marina Glades about two kilometres from the coast and the St Francis Bay central business area (Maps 1-2).

#### Map

1:50 000 3424 BB Humansdorp

## **ARCHAEOLOGICAL INVESTIGATION**

### **Methodology and results**

The investigation was conducted by two people on foot. GPS readings were taken with a Garmin and all important features were digitally recorded. Consultation was conducted with the local Gamakwa KhoiSan community regarding the archaeological heritage of the area.

The area investigated is next/part of the Sand River flood plain, dune system and adjacent wetlands. The property is situated next to the Kromme River estuary and the development will take place within 100 metres from the high water mark. It is a large clearing covered with dense, short cut grass surrounded by dense indigenous, alien and 'vlei' vegetation (Figs 1- 6). Due to the dense vegetation cover, no archaeological sites/materials were observed. A large number of mole heaps were investigated throughout the property for possible archaeological material pushed to the surface, but none was found. The property is situated within the sensitive coastal zone (two kilometres from the coast) and it is possible that such materials are covered by dune sand and vegetation.

Although it is not part of this report, other cultural features are also reported, should there be a need to investigate them, The core of the original residence on the property is older than 60 years, but additional rooms were added around the core over the years. There is also a grave with a headstone of Jacob Hermanus Petrus, 1870-1929. Development will not take place near, or affect these features (Figs 7-8).

### **Discussion**

The dense vegetation cover of the proposed property for development made it impossible to find archaeological sites. The property is situated two kilometres from the coast and falls inside the distance shell middens are expected to be found from the beach. Surveys and observations along the adjacent coast yielded large numbers of shell middens. It is therefore possible that archaeological sites/materials (including human remains) may be found when the property is developed. Such material must be reported to the nearest museum, archaeologist or to the South African Heritage Resources Agency if exposed (see general remarks and conditions below).



**Figs 1-8. General views of the proposed property for development (top two rows), dense vegetation surrounding the area (third row), the original residence with additions (bottom left) and the grave (bottom right). The red arrow marks the house and the blue arrow the grave.**



## RECOMMENDATIONS

1. All construction work must be monitored. If any concentrations of archaeological material (especially human remains) are exposed during construction, all work in that area should cease and it should be reported immediately to the nearest museum/archaeologist or to the South African Heritage Resources Agency, so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to remove/collect such material (See Appendix B for a list of possible archaeological sites that may be found in the area). Recommendations will follow after the investigation and may include:
  - A Phase 2 Mitigation process to systematically excavate and to remove the archaeological deposits before construction of the development continues.
2. Construction managers/foremen should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.
3. Graves and graveyards older than 60 years are protected by the National Heritage Resources Act (Act No. 25 of 1999, Section 36). It is recommended that the grave be fenced off if the development takes place near the grave.

## GENERAL REMARKS AND CONDITION

**Note:** This report is a phase 1 archaeological heritage impact assessment/investigation only and does not include or exempt other required heritage impact assessments (see below).

The National Heritage Resources Act (Act No. 25 of 1999, section 35) (see Appendix A) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must be emphasised that the conclusions and recommendations expressed in this archaeological heritage sensitivity investigation are based on the visibility of archaeological sites/features and may not therefore, reflect the true state of affairs. Many sites/features may be covered by soil and vegetation and will only be located once this has been removed. In the event of such finds being uncovered, (such as during any phase of construction work), archaeologists must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed. The onus is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999.

It must also be clear that Archaeological Specialist Reports (AIA's) will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should grant a permit or a formal letter of permission for the destruction of any cultural sites.

## **APPENDIX A: brief legislative requirements**

Parts of sections 35(4), 36(3) and 38(1) (8) of the National Heritage Resources Act 25 of 1999 apply:

### ***Archaeology, palaeontology and meteorites***

35 (4) *No person may, without a permit issued by the responsible heritage resources authority—*

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;*
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;*
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.*

### ***Burial grounds and graves***

36. (3) (a) *No person may, without a permit issued by SAHRA or a provincial heritage resources authority—*

- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;*
- (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or*
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.*

### ***Heritage resources management***

38. (1) *Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as –*

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
- (b) the construction of a bridge or similar structure exceeding 50m in length;*
- (c) any development or other activity which will change the character of the site –*
  - (i) exceeding 5000m<sup>2</sup> in extent, or*
  - (ii) involving three or more erven or subdivisions thereof; or*
  - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA, or a provincial resources authority;*
- (d) the re-zoning of a site exceeding 10 000m<sup>2</sup> in extent; or*
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must as the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.*

## **APPENDIX B: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM COASTAL AREAS: guidelines and procedures for developers**

### **Shell middens**

Shell middens can be defined as an accumulation of marine shell deposited by human agents rather than the result of marine activity. The shells are concentrated in a specific locality above the high-water mark and frequently contain stone tools, pottery, bone and occasionally also human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds 1 m<sup>2</sup> in extent, should be reported to an archaeologist.

### **Human Skeletal material**

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general the remains are buried in a flexed position on their sides, but are also found buried in a sitting position with a flat stone capping and developers are requested to be on the alert for this.

### **Fossil bone**

Fossil bones or any other concentrations of bones, whether fossilized or not, should be reported.

### **Stone artefacts**

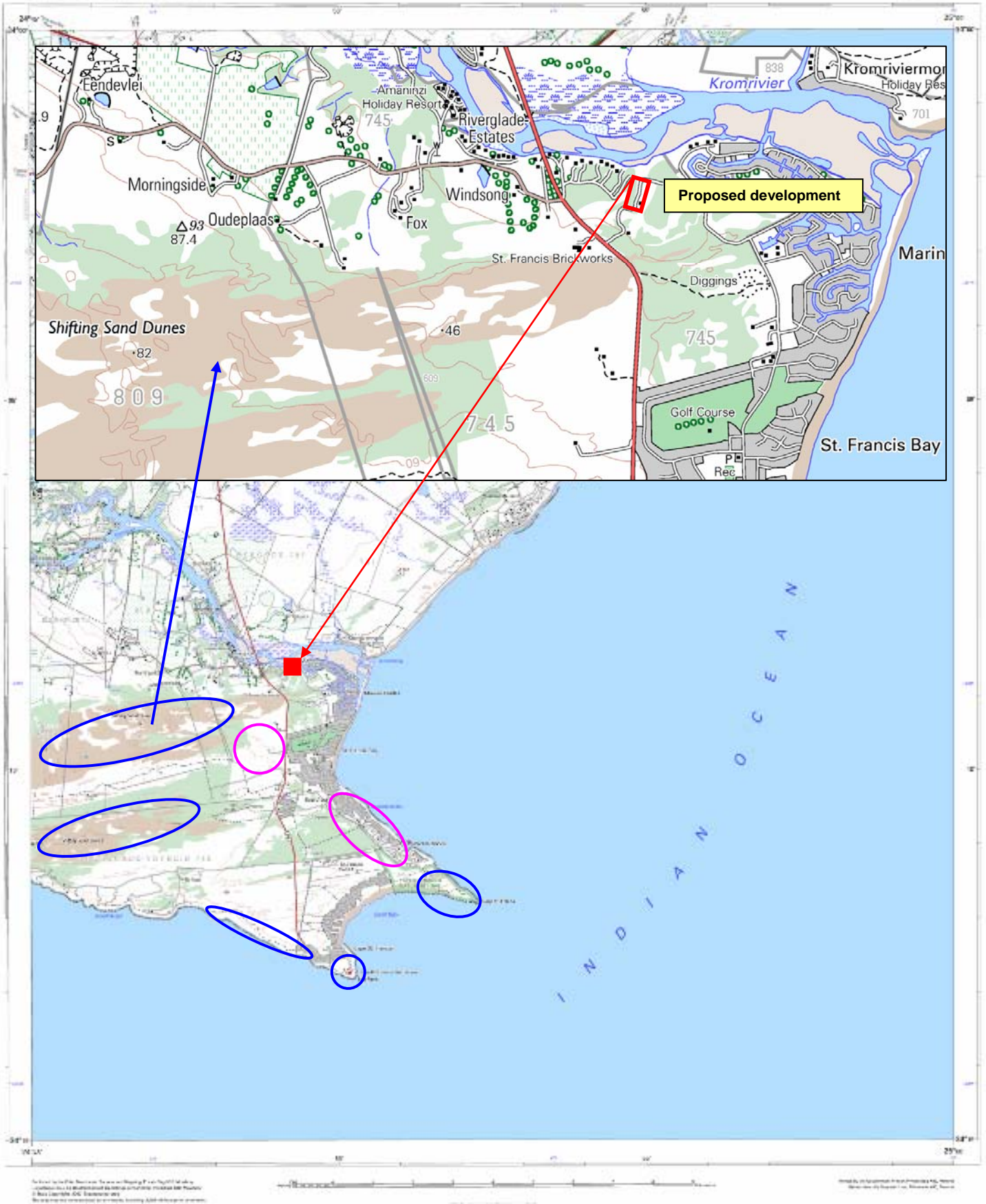
These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

### **Stone features and platforms**

These occur in different forms and sizes, but easily identifiable. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and filled in with charcoal and marine shell. They are usually 1-2 metres in diameter and may represent cooking platforms for shell fish. Others may resemble circular single row cobble stone markers. These occur in different sizes and may be the remains of wind breaks or cooking shelters.

### **Historical artefacts or features**

These are easy to identify and include foundations of buildings or other construction features and items from domestic and military activities.



**Map 1. 1:50 000 maps indicating the location of the proposed development. The blue ovals mark current concentrations of archaeological sites and the pink ones concentrations destroyed by recent residential and golf course developments.**



Map 2. Aerial photographs indicating the location of the proposed development. The red rectangles mark the approximate size and the blue dot the grave.